

ABSTRACT OF THE DISCLOSURE

A phasor monitoring system and apparatus for use with a distribution system for electricity wherein periodic three phase electricity is distributed in a plurality of circuits. The phasor monitoring apparatus comprises a phasor transducer that has an input that receives analog signals representative of parameters of electricity in a circuit of the distribution system, an analog to digital converter that receives the analog signals and outputs a digital data signal representative of the analog signals, a processor coupled to the analog to digital converter to receive the digital data signal output from the analog to digital converter, programming on the processor that computes phasor data representative of the electricity in the circuit based on the digital data received from the analog to digital converter and provides a digital output representative of the phasor data, and a network-compatible port coupled to the processor to transmit the phasor data onto a data network coupled thereto. The phasor monitoring system comprises a data network interconnecting a plurality of phasor transducers each associated with one of the circuits of an electricity distribution system. A phasor array processor is connected to the data network and receives phasor data from a plurality of the phasor transducers connected to the network. The phasor array processor computes combined phasor data for the plurality based upon the phasor data received from the plurality of phasor transducers.